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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,881	04/11/2005	Jens Spille	PD020100	9230
24498	7590	10/22/2008		
Joseph J. Laks Thomson Licensing LLC 2 Independence Way, Patent Operations PO Box 5312 PRINCETON, NJ 08543			EXAMINER LEE, PING	
			ART UNIT 2614	PAPER NUMBER
			MAIL DATE 10/22/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/530,881	SPILLE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ping Lee	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 16,17,19-23 and 25-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16,17,19-23 and 25-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 16, 17, 19-23 and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Potard et al (hereafter Potard) ("Using XML Schemas to Create and Encode Interactive 3-D Audio Scenes for Multimedia and Virtual Reality Applications").

Regarding claims 16, 22 and 28, Potard discloses a method for coding a presentation description of an audio signal comprising:

assigning a value (for example, reflecting and absorbing coefficient) to a first non-point sound source (section. 3.3.1., the original source is "dry", the first child object of a complex audio source) using said audio signal;

generating for said first non-point sound source a parametric description (Table 1), said parametric description including said assigned value in a field specifying decorrelation information (factors such as, for example, reflecting and absorbing coefficient and pitch transformation would distinguish one child sound source from another child sound source);

changing said value for an additional non-point sound source (another child object for the complex audio source; see section 2.3.1., pitch transformation) using the same audio signal (when the members in a choir sing the same audio); and

generating, for said additional non-point sound source, a parametric description, said parametric description including said changed value in a field specifying

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decorrelation information to specify a different decorrelation for said additional non-point sound source.

Regarding claims 16, 22 and 28, Potard fails to show the changed value for an additional non-point sound source is incrementing the value. Potard teaches a specific example on how to use two or more non-point sound source to defined a complex audio source, such as a choir in Fig. 1. Potard explicitly teaches that pitch transformation is applied to each non-point sound source. One skilled in the art would have expected that whether to increment or decrement the value (in terms of the pitch transformation) would be the decision by the user depending on how he/she wants to create the sound scene. Thus, it would have been obvious to one of ordinary skill in the art to modify Potard by adjusting the value appropriately, including increment the value, in order to create the sound effect as intended by the user.

Regarding claims 17 and 23, Potard illustrates in Fig. 5 that separate sound sources are coded as separate audio objects. Fig. 7 is another illustration. Fig. 1 shows the first node defining an object (choir object) and the second node defining the wideness (how many children) and presentation of said non-point sound source by multiple decorrelated point sound sources (by reflective surface and pitch transformation).

Regarding claims 19, 20, 25 and 26, Potard discloses that the size and the defined shape are given by an opening angle having a vertical and a horizontal component (sect. 2.5).

Regarding claims 22 and 29, Potard further illustrates in Figs. 6 and 7 how to decode a presentation description. The steps of evaluating at least of said fields specifying said decorrelation information included in the parametric description of said non-point sound source and the step of selecting, depending on a value assigned to a field in said parametric description, one of the following: one of several decorrelations to the audio signal of said non-point sound source, the strength of the decorrelation of the selected decorrelation read on Table 1 and sect. 3.1 in which the user is allow to modify the scene. The scene, as understood by Potard's disclosure, is defined by many factors, including and not limiting to the decorrelations to non-point sound source and the strength of the decorrelation.

Regarding claim 21 and 27, Potard discloses that the same audio signal is used for each of several non-point sound sources (such as several singers in a choir singing the same song). A different value is assigned to apply to different decorrelations (position of each singer in choir, pitch transformation, reflective surface) to each of said non-point sound sources. The claimed complex shaped non-point sound source read on one of several examples as discussed under section 2.3.1.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 16, 22, 28 and 29 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping Lee whose telephone number is 571-272-7522. The examiner can normally be reached on Monday, Wednesday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ping Lee/  
Primary Examiner, Art Unit 2614

pwl